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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,537	07/25/2003	Jeffrey Kent Fredenburgh	JJ-10 072-1-1US	1156

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EXAMINER

WARE, DEBORAH K

ART UNIT PAPER NUMBER

1651

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/626,537	<b>Applicant(s)</b> FREDENBURGH ET AL.	
	<b>Examiner</b> Deborah K. Ware	<b>Art Unit</b> 1651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

Claims 1-12 are presented for examination on the merits.

#### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada 2,243,011 on July 13, 1998. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

Also domestic priority is noted at page 1, line 1, of the instantly filed specification, however, the current status has not been provided and Applicants are requested to update these parent cases at the appropriate places at page 1, of the instant specification. The application divisional 09/726,032, has been abandoned and such status should be noted at page 1, of the specification.

#### ***Claim Objections***

Claims 4-5 are objected to for improper use of scientific notation.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4-5 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The

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claimed ranges which should be by the way about  $10^6$  and about  $10^8$  at line 3 of claim 4 as well as about  $10^7$  at line 3 of claim 5 are not supported in the instantly filed specification at pages 18 and 25-26 or at page 21 concerning claims 4-5.

Therefore, these claims are not clearly described and unless Applicant can provide support for these specific ranges which do not appear to be supported by the specification they should be canceled or amended to reflect the proper ranges as supported by the specification at pages 18, 21, and 25-26. Further, the range of from about 0.25 wt% to about 20 wt% is not supported either in the specification for the treatment rate wherein at page 12, of the instant specification the range is .25 wt% to about 2 wt %. This may be a typo in the specification but this is uncertain and the claims are not deemed enabled for their written description in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rendered vague and indefinite for failing to set forth proper antecedent basis for the recitation of "odors" at line 9, wherein it unclear what odors are intended. It is suggested to insert —said—before "odors" at lines 9 and 11. Further, "organic material" recited at line 10 also lacks antecedent basis and a similar amendment is suggested before "organic material" at line 10 as well.

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Claim 2 is rendered vague and indefinite for the recitation of “selected from the group of bacterial genera Bacillus” since there is only one genus of Bacillus, there is not more than one family as the recitation of “genera” would indicate. Thus, it is suggested to modify the language to simply state —selected from the genus of Bacillus--.

Furthermore, because of the reasons set forth above for claim 2, claim 3 is rendered vague and indefinite and it is suggested to insert after “the bacteria” , -- of the genus Bacillus,-- .

Furthermore, claims 1-3 lack antecedent basis for the recitation of “the bacteria” wherein proper antecedent basis is not set forth. The insertion of —dormant—before “bacteria” is suggested.

Also claim 4, is rendered vague and indefinite for the recitation of “carpet fiber” since the term lacks antecedent basis and the term —said—or —the—should be inserted before it as well as pluralizing “fiber” since there is more than one fiber recited in claim 1.

Claim 6 is rendered vague and indefinite for failing to end in a period and for lacking antecedent basis for the recitation “the dormant bacterial preparation” at lines 1-2. This term has not been recited in claim 5, and although “a preparation of dormant bacteria” is recited in claim 1, the it is the bacteria themselves that are referred to in each of the dependent claims from which claim 6 depends and the inconsistent usage of terms is not suggested because it is unclear whether or not the preparation has changed or not. Consistent use of terms throughout all claims is suggested.

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Claim 7 is rendered vague and indefinite for the same reasons discussed above for claim 6. Claim 7 should also end in a period.

Claim 10 is rendered vague and indefinite for the recitation of "the preparation" at lines 1-2 wherein it is unclear whether the preparation of claim 1 has changed and the antecedent basis of the term is unclear in claim 5.

The other claims not discussed here are rejected and rendered vague and indefinite for reasons set forth above because they depend from rejected base claims discussed above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

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the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. in view of WO 97/43385, Horney et al. , Blyth et al and Vinod, all cited on the enclosed PTO-892 Form.

Claims are drawn to a composition for controlling odor associated with deposits of organic material which can cause odors on a carpet, the method comprising applying the composition comprising dormant bacteria and other agent(s). The other agents can be stain-blocking chemicals or fluorochemicals. Also the stain-blocking agents can be varied sulfonated polymers (see claims 9 and 18).

Lin et al teach protected spore formers as the desired bacteria of which are of the genus *Bacillus* (B.) and include species *B. laevolacticus*, *B. pasteurii* and *B. amyloliquefaciens*. Note col. 3, lines 19-21 and col. 4, lines 40-65. Further, the cell counts are within  $10^6$  to  $10^8$  range, note col.s 5-6, lines 35-40.

WO Patent, cited above, teach method and composition for controlling odor for soft surfaces and hard surfaces using microbial enzymes and sulfonated surfactants, anti-soil agents (pages 32-33, all lines), sodium carbonate (page 56,

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line 20), bicarbonates (page 30, line 33), condensation polymers (page 12, lines 20-35).

Horney et al teach method and composition for controlling odor for soft surfaces using Bacillus bacterial agent and other additives as necessary.

Bacillus megaterium is specifically disclosed. Note col. 2, lines 30-50 and see the abstract. Also note col. 3-4, all lines.

Each of Blyth et al. and Vinod teach method and composition for controlling stains on soft surfaces, such as carpets, comprising applying stain blockers and fluorochemicals. Specifically note Vinod, at col. 6, lines 45-65; and note abstracts of both references.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was filed to combine the disclosure of Lin, WO Patent, Horney, Blyth and Vinod in order to provide for a carpet composition having associated bacteria for controlling odor. Each of Lin, WO Patent and Horney teach deodorizing using bacterial agents and their products (i.e. dormant spores, enzymes, etc.) To select for dormant bacteria to control and provide for a composition for odor control is clearly taught. To combine the dormant bacteria with other agents is also disclosed wherein surfactants will adhere organic deposits. Other agents such as bicarbonate (i.e. sodium bicarbonate) are also disclosed. Specifically stain-blockers and fluorochemicals are well known in the art to be useful for treating soft surfaces and to add them to dormant bacteria is clearly within the purview of an ordinary artisan. Horney clearly teaches additives to dormant bacteria is well known. The bacterial counts useful are



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disclosed. The specific agents are disclosed. To combine the two is clearly an obvious modification of the cited prior art. Thus the claims are *prima facie* obvious over the newly applied art rejection.

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449.

Therefore, the claims are properly rejected.

The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

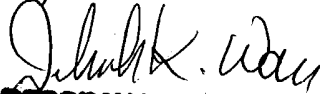
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DEBORAH K. WARE**  
**PATENT EXAMINER**

Deborah K. Ware  
June 15, 2004